

cronologic

xTDC4-PCIe
Product Brief



xTDC4-PCIe

xTDC4-PCIe high precision TDC



The xTDC4-PCIe is a high precision common start time-to-digital converter (TDC). The timestamps of leading or trailing edges of digital pulses are recorded with a single shot time resolution of 13 ps.

Facts

Channels	1 AC-coupled start channel 4 AC-coupled stop channels
Dead-time btw. hits on same channel	<5 ns
Max. range	109.22 μ s (24 bit timestamp)
Max. start frequency	4 Mhz
L0 FIFO	16 words/channel
L2 FIFO	10000 words
TDC binsize	13.03 ps
TDC timing resolution	8 ps
Connectors	5x LEMO 00
Throughput	200 Mbyte/s
Form factor	PCIe 1.1 x1, bus master

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